Title (en)

PROCESS FOR PREPARING BIOMASS ATTACHED TO A CARRIER

Publication

EP 0028846 B1 19871209 (EN)

Application

EP 80200764 A 19800813

Priority

NL 7908138 A 19791107

Abstract (en)

[origin: EP0028846A1] A granular carrier is contacted in a reaction space with a continuous stream of liquid which contains a sufficiently wide flora of microorganisms and sufficient nutrients for the growth and /or preservation of the microorganisms until a sufficiently thick layer of microorganisms is attached to the carrier, while in the liquid 0.1-1.5 kW of mechanical energy per m<3> of reactor liquid, is dissipated at least partly in the form of gas bubbling through the liquid and the residence time of the liquid in the reaction space is kept lower than the reciprocal maximum growth rate of the microorganisms. More preferably an aerobic biomass attached to a carrier is produced, by applying liquids, wherein the growth rate is not limited by the concentration of nutrients and by adjusting a residence time of the liquid in the reactor of below 45 minutes. <??>The process can be applied for the production of all kinds of biomass attached to a carrier, e.g. biomasses as are applied in the biological purification of waste-water, aerobic biomass, anaerobic biomass, nitrificating biomass and denitrificating biomass, as well as biomasses forming a desired metabolic product which inhibits its own production rate at higher concentrations, e.g. biomass for the production of alcohol.

IPC 1-7

C02F 3/12; C02F 3/28; C12M 1/16

IPC 8 full level

C02F 3/00 (2006.01); **C02F 3/02** (2006.01); **C02F 3/12** (2006.01); **C02F 3/28** (2006.01); **C12M 1/16** (2006.01); **C12N 1/00** (2006.01); **C12N 11/00** (2006.01); **C12N 11/14** (2006.01); **C12P 1/00** (2006.01); **C12P 7/06** (2006.01)

CPC (source: EP US)

C02F 3/085 (2013.01 - EP US); **C02F 3/2806** (2013.01 - EP US); **C12N 1/00** (2013.01 - EP US); **C12N 11/14** (2013.01 - EP US); **C12P 1/00** (2013.01 - EP US); **C12P 7/06** (2013.01 - EP US); Y02E 50/10 (2013.01 - EP US); Y02E 50/30 (2013.01 - EP US); Y02W 10/10 (2015.05 - EP US); Y10S 210/903 (2013.01 - EP US); Y10S 435/801 (2013.01 - EP US)

Citation (examination)

- GB 2082164 A 19820303 - UNISEARCH LTD
- Water Sci. Tech - vol. 15 - 1983 - Pergamon Press Ltd. - John S. Jeris - Industrial waste water treatment using anaerobic fluidized Bed reactors - pages 169-176

Cited by

US5518618A; US4532042A; EP0241602A1; EP0241999A1; FR2593188A1

Designated contracting state (EPC)

AT CH DE GB IT LI NL SE

DOCDB simple family (publication)

EP 0028846 A1 19810520; **EP 0028846 B1 19871209**; AT E31290 T1 19871215; BE 884669 A 19810209; DE 3072059 D1 19880121; DK 155800 B 19890516; DK 155800 C 19891002; DK 329680 A 19810508; ES 494349 A0 19810316; ES 8103715 A1 19810316; FR 2469453 A1 19810522; FR 2469453 B1 19840210; GR 69869 B 19820720; IE 53571 B1 19881221; IE 801797 L 19810507; JP S5682092 A 19810704; JP S626799 B2 19870213; LU 82688 A1 19820510; NL 7908138 A 19810601; PT 71649 A 19800901; PT 71649 B 19810611; US 4560479 A 19851224; US 4655924 A 19870407

DOCDB simple family (application)

EP 80200764 A 19800813; AT 80200764 T 19800813; BE 201675 A 19800807; DE 3072059 T 19800813; DK 329680 A 19800731; ES 494349 A 19800819; FR 8017763 A 19800812; GR 800162712 A 19800820; IE 179780 A 19800826; JP 15675480 A 19801107; LU 82688 A 19800804; NL 7908138 A 19791107; PT 7164980 A 19800805; US 46163583 A 19830127; US 78206085 A 19850930